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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,846	12/03/2001	Khuy V. Nguyen	2000.83	1022

29494 7590 06/24/2003
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EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,846

Applicant(s)

NGUYEN ET AL.

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0528.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 3, the Examiner suggests delete "less than 10 percent by blend weight" at line 3, and add --, with the elastomer comprising less than 10 percent by blend weight-- after "thereof" at line 6.

For claims 4, 5 and 8, line 2 of each claim, the term "Gurley" is vague and indefinite, the Examiner suggests add --air permeability-- after "Gurley". Additionally, for claims 4 and 5, the absence of the volume renders the claims vague and indefinite. For the purpose of this Office action, it is presumed to be 10 cc.

In claim 8, line 1, the phrase "improving a membrane" is vague and indefinite, i.e., it would not be clear to one of ordinary skill in the art as to what property is being improved. Clarification is requested.

In claim 8, line 8, please change "and the elastomer" to --with the elastomer--.

In claim 9, line 2, change "blend" to --elastomer--. Also, at line 3, delete "of the elastomer".

In claims 10 and 11, line 1 of each claim, please change "blend" to --the elastomer--.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' admitted prior in view of Palomo et al. (US 5938874).

It is noted that Applicants appear to have admitted that it is known art that a microporous sheet can be made of polyolefins, such as polypropylene and polyethylene (Specification, page 3, first paragraph).

For claims 9-11, the admitted prior art lacks an express teaching that the mechanical property of the polyolefin membrane can be improved by using a blend of polyolefin and an elastomer. However, it is noted that Palomo's invention is related to a microporous film. In one embodiment, Palomo expressly teaches that a flexible and resilient microporous film comprises polyethylenes, polypropylenes, thermoplastic elastomers, etc., or blends of these polymers (column 4, lines 29-34). Further, it is believed that thermoplastic elastomers inherently encompass the commonly known ethylene-propylene rubber (EPR) and ethylene-propylene-diene terpolymer rubber (EPDM). As such, it would have been obvious to one of ordinary skill in the art to

modify the admitted microporous film with a suitable blend of polyolefin and thermoplastic elastomer such as EPR and EPDM, motivated by the desire to improve the flexibility and resiliency of the film. Regarding the amount of elastomer used in the blend, it is also believed to be either inherently disclosed by Palomo, or an obvious optimization to one skilled in the art, motivated by the desire to obtain optimal required film flexibility and resiliency.

Claims 1-3 and 6-8 essentially mirror the product claims 9-11 and employ only a conventional method step, i.e., providing, and as such are rejected.

For claim 4 and 5, since the scope of the inventions, i.e., microporous membranes, taught by the prior art and Palomo are essentially the same as the instant claimed invention, it is believed that a suitable air permeability is also an obvious optimization to one skilled in the art, motivated by the desire to retain the proper membrane functionalities such as breathability and liquid barrier property, etc.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Application/Control Number: 10/005,846
Art Unit: 1771

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC
June 23, 2003

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP ~~1300~~
1700

Daniel Zinker